National Institute of Environmental Health Sciences

Causes, prevention, and mitigation workgroup report

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Abstract:

Cyanobacteria (blue-green algae) are estimated to ahve evolved 3.5 billion years ago, at which time they began to add oxygen to the existing anaerobic atmosphere, actually changing the chemistry of the planet and allowing new life forms to evolve. These ubiquitous microbes are capable of tolerating desiccation, hypersalinity, hyperthermal conditions, and high ultraviolet radiation, often for extensive periods of time. Recently, cyanobacteria have responded to human alterations of aquatic environments, most notably nutrient-enhanced primary production, or eutrophication. In fact, cyanobacterial blooms are now viewed as widespread indicators of freshwater, brackish and marine eutrophication.

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Resource Description

Communication: ☑

resource focus on research or methods on how to communicate or frame issues on climate change; surveys of attitudes, knowledge, beliefs about climate change

A focus of content

Communication Audience: ☑

audience to whom the resource is directed

Public

Early Warning System: ☑

resource focus on systems used to warn populations of high temperatures, extreme weather, or other elements of climate change to prevent harm to health

A focus of content

Exposure : ☑

weather or climate related pathway by which climate change affects health

Food/Water Quality

Food/Water Quality: Biotoxin/Algal Bloom

Geographic Feature:

resource focuses on specific type of geography

Freshwater, Ocean/Coastal

Geographic Location:

resource focuses on specific location

Global or Unspecified

Health Co-Benefit/Co–Harm (Adaption/Mitigation):

specification of beneficial or harmful impacts to health resulting from efforts to reduce or cope with greenhouse gases

A focus of content

Health Impact:

specification of health effect or disease related to climate change exposure

Infectious Disease

Infectious Disease: Foodborne/Waterborne Disease

Foodborne/Waterborne Disease: Marine Toxin Syndrome

Intervention:

strategy to prepare for or reduce the impact of climate change on health

A focus of content

Medical Community Engagement:

resource focus on how the medical community discusses or acts to address health impacts of climate change

A focus of content

Mitigation/Adaptation:

mitigation or adaptation strategy is a focus of resource

Adaptation, Mitigation

Resource Type:

format or standard characteristic of resource

Review

Timescale:

time period studied

Time Scale Unspecified